

1. A device for gas combustion, characterized in that it comprises a basic structure (1), which is formed by a solenoid valve (2), which is connected by one of its connections to a gas-supply piping (3), the other connection of the solenoid valve (2) contacts a pressure regulator (4), at the end of which there is mounted a gas burner (5);
- 5 the basic structure (1) further comprises a pilot gas burner (6) and a heat sensor (7), the former intended for producing a spark causing the gas supplied to the gas burner (5) to ignite, whereas the latter will perform the function of a parameter for the constant measuring of the heat rate generated by the device now proposed, signaling a possible condition wherein the burning of gas, through gas burner (5) has been discontinued, thus
- 10 enabling that the external control means (8) may discontinue the flow of gas.

  

2. The device for gas combustion, according to claim 1, characterized in that the pressure regulator (4) may be replaced with a motorized non-return valve.
  
3. The device for gas combustion, according to claim 1, characterized in that the pressure regulator (4) shows a tubular configuration, with a fixing thread (9) at its two front and rear ends, being internally provided with a calibrated orifice (4a), through which the gas flow is to pass for reaching the gas burner (5).
  
4. The device for gas combustion, according to claim 1, characterized in that the gas burner (5) is intended for receiving the gas flow reaching through the pressure regulator (4) and to distribute that gas in such a way that, during its burning, there be generated the highest possible amount of lighting.

5. The device for gas combustion, according to claim 1, characterized in that the pilot gas burner (6) is composed of a connection terminal (10), an electrode (11), a porcelain body (12) and a protection crown (13), the pilot gas burner (6) relies upon a support structure (14), enabling its mounting on the basic structure (1).

6. The device for gas combustion, according to claim 1, characterized in that heat sensor (7) comprises an optical coupler (16), a metallic body (17), processing module (18), bimetallic (19) and a fixing thread (20).

7. A device for gas combustion, characterized in that it integrates a light-generating unit (21), which can be connected to a gas-supply piping (3), as well as to the several electrical connections (22), feeding the solenoid valve (2), pilot gas burner (6) and heat sensor (7).

8. A device for gas combustion, characterized in that the device for gas combustion in issue may be controlled by a control electronic module (15).

9. The device for gas combustion, according to claim 8, characterized in that the control electronic module (15) relies upon an on/off knob (23), a general switch (24), a fuse (25) and feeding connection 110/220VCA (26), said control electronic module (15) also incorporates a transformer (27) and a sparkler (28).

10. The device for gas combustion, according to claim 9, characterized in that the control electronic module (15) may be remotely controlled by a computer (29), which is connected thereto.

11. A device for gas combustion, characterized in that said device of  
combustion may be used in a lighting system relying upon a set of light-generating units  
(21); the light-generating units (21) are connected through a gas-supply piping (3) to a  
gas storage battery (30), thus forming a supply line which further relies upon at least a  
5 pressure manometer (31) and valves (32).

12. The device for gas combustion, according to claim 11, characterized in  
that the lighting system may be gas-fed originating from other supply means.

13. The device for gas combustion, according to claim 12, characterized in  
that the gas-supply means may comprise piped gas.

14. The device for gas combustion, according to claim 11, characterized in  
that the lighting system based upon the light-generating units (21) may incorporate at  
least a gas sensor (33), acting as a complementary means of safety to the system.